

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of determining ~~the~~ an acoustical transfer impedance  $Z_t$  between a first position and a listening position of a human being, the method ~~comprising~~ comprising:

- generating an acoustical volume velocity  $Q$  in the listening ~~position~~, position;
- measuring a response quantity  $p$  at the first position resulting from the ~~volume-velocity  $Q$~~ , velocity  $Q$ ; and
- determining ~~the~~ an acoustical transfer impedance  $Z_t$  as ~~the~~ a response quantity  $p$  divided by the acoustical volume velocity  $Q$ ,  $Z_t = p/Q$ ,

wherein the acoustical volume velocity  $Q$  is generated using a simulator simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear with an orifice in the simulated head and a sound source in the simulator for outputting the acoustical volume velocity  $Q$  through the orifice, so as to generate a sound field around the simulator that simulates a sound field around a human being.

2. (Previously Presented) A method according to claim 1, wherein the simulator simulates the head and a torso of a human being.

3. (Previously Presented) A method according to claim 1, wherein the simulator comprises a sound source in the interior of the simulator and a pair of microphones arranged to measure a pair of sound pressures in a canal leading from the sound source to the orifice, and that the method further comprises determining the volume velocity  $Q$  based on the pair of sound pressures.

4. (Previously Presented) A method according to claim 1, wherein the response quantity is sound pressure.

5. (Previously Presented) A method according to claim 1, wherein measuring the response quantity comprises at least one of measuring a sound pressure by at least one microphone and measuring structural vibrations by at least one vibration sensor.

6. (Currently Amended) A simulator ~~for use with the method according to claim 1~~ and simulating acoustic properties of at least a head of a human being, the simulator ~~comprising~~ comprising:

\_\_\_\_\_ a simulated human ear with an orifice in the simulated ~~head~~ head; and  
\_\_\_\_\_ a sound source in the simulator for outputting ~~the~~ an acoustical volume velocity  $Q$  through the orifice, so as to generate a sound field around the simulator that simulates a sound field around a human being.

7. (Previously Presented) A simulator according to claim 6, wherein the simulator simulates the head and a torso of a human being.

8. (Previously Presented) A simulator according to any claim 6, wherein the simulator comprises two orifices simulating a left ear and right ear respectively of the simulated human being.

9. (Previously Presented) A simulator according to claim 8, wherein means are provided for selectively outputting sound signals through the simulated left ear or through the simulated right ear.

10. (Previously Presented) A simulator according to claim 6, wherein the simulator comprises means for measuring the sound output from the simulated ears.

11. (Previously Presented) A simulator according to claim 10, wherein the means for measuring the sound output from the simulated ears comprises a pair of microphones for measuring the output sound volume velocity.

12. (Canceled)

13. (Currently Amended) A simulator according to claim 6, further comprising:  
~~for use with the method according to claim 3 and simulating acoustic properties of at least a~~  
~~head of a human being, the simulator comprising a simulated human ear with an orifice in~~  
~~the simulated head and a sound source in the simulator for outputting the acoustical volume~~  
~~velocity Q through the orifice, so as to generate a sound field around the simulator that~~  
~~simulates a sound field around a human being.~~

a pair of microphones arranged to measure a pair of sound pressures in a canal  
leading from the sound source to the orifice,

wherein the simulator is adapted to determine the volume velocity Q based on  
the pair of sound pressures; and

wherein the sound source is in the interior of the simulator.

14. (Currently Amended) A simulator according to claim 6, ~~for use with the~~  
~~method according to claim 4 and simulating acoustic properties of at least a head of a human~~  
~~being, the simulator comprising a simulated human ear with an orifice in the simulated head~~  
~~and a sound source in the simulator for outputting the acoustical volume velocity Q through~~  
~~the orifice, so as to generate a sound field around the simulator that simulates a sound field~~  
~~around a human being.~~

wherein the simulator is adapted to:

generate the acoustical volume velocity Q in the listening position,

measure a response quantity p at the first position resulting from the  
volume velocity Q, and

determine an acoustical transfer impedance  $Z_1$  as a response quantity p  
divided by the acoustical volume velocity Q,  $Z_1 = p/Q$ , and

wherein the response quantity p is sound pressure.

15. (Currently Amended) A simulator according to claim 14, wherein the simulator is adapted to measure at least one of a sound pressure by at least one microphone and structural vibrations by at least one vibration sensor. ~~for use with the method according to claim 5 and simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear with an orifice in the simulated head and a sound source in the simulator for outputting the acoustical volume velocity  $Q$  through the orifice.~~